

# THE ILLUSION OF THE AUTOMATION MAGIC WAND

A Modernization Story

**QAT GLOBAL**

LEGACY MODERNIZATION

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# The Shopkeeper and the Sorcerer

The shopkeeper looks at the wares sitting on the shelves in his shop, lamenting how they've lost their luster and no longer work with the fancy new ones his son so enjoys. He looks in the cash register to find that while business is good, it's not what it should be. Business should be booming. As he looks out the window, he sees his longtime customers checking out the new shop down the road. Just then, a popular sorcerer walks past, he notices the shopkeeper in the window. He stops and comes inside.

"Hello, good sir," the shopkeeper says to the sorcerer. "How may I help you today?"

The sorcerer responds, "The real question is, how may I help you? I saw you looking out the window as the people passed your shop by, looking sad and frustrated."

The shopkeeper explains that he wishes there was a way to make his wares appeal to customers more and work with all these newfangled things his son thinks are so amazing.

"Well, that's no problem at all. For a little of your gold, I will wave my magic wand over your old wares and they will automatically transform into something new - like those newfangled wares over there," says the sorcerer.

While the shopkeeper thinks it sounds a little too good to be true, he hands over his gold and the sorcerer waves his wand. With a burst of light and a bunch of noise, his old wares transform.





“Wow, my old wares look just like those newfangled ones. Thank you so much.” says the shopkeeper.

The shopkeeper’s son comes through the door as the sorcerer takes a bow and departs.

“Father, what has happened? Everything looks wonderful!” says the son as we walks over to the shelves to take a look inside one of the boxes.

“I paid the sorcerer to update everything so it’s all modern like your newfangled things,” say the shopkeeper to his son.

With a look of mixed sadness and anger, the son says to his father, “Did you take a look inside? There’s a bunch of mixed up stuff in these boxes. They’re never going to work right. We’re going to have to take virtually all of these apart and put the pieces together by hand.”

Unfortunately, this story is all too common.





## Real World Modernization

Application modernization projects tend to be complex, costly, and come with some level of risk, making some degree of automation in the process appear very appealing. In considering only the costs, one may initially estimate that using automation has to be the least expensive option for modernizing applications. However, modernizing your applications should mean more than simply replacing one legacy application silo with a new one, or even procuring the newest vendor technology. It should be about creating open solutions that were truly designed to be responsive to the organization's business needs within a real agile architecture - modular by design and implemented with a portfolio of services.

Organizations should always be skeptical of syntactic, or line-by-line, code transformation solutions unless their existing system is well written and well structured. Often, this is a lot to ask of systems that have been in existence for decades.



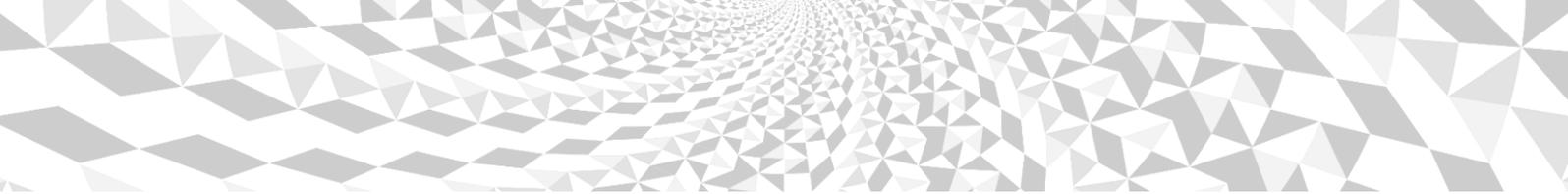


Some additional factors that should be carefully considered when considering a manual or automated transformation approach include:

**Legacy to Legacy** - The application that has been converted using automation is still a legacy application. If the language that it has been automatically converted to has new features and facilities added to it, or if in the future it becomes unsupported, unfavorable, or has scarce development resources, your organization will find itself in exactly the same situation as it is today. With manual transformation, you get a modern application that takes advantage of these new features and facilities.

**Business Rules** - Automation converts code to code and it makes no attempt to understand the business rules that are embedded in that code. Your organization ends up no better off in terms of the business benefits it can derive from its applications using automation – the code you didn't understand before, you still won't; it's just now in a modern language. Adaptability and reuse is as hard as it was before the automated conversion took place. A manual transformation starts by understanding the business rules embedded in the legacy code and works from them to create logical, flexible code that can be adapted and reused as desired in the future.

**Features in the New Language** - The ability to take advantage of the features in the new language is not as easy as might be portrayed with an automated conversion. For example, if the conversion has been to Java, then it will require major re-architecting (a manual process) of the application to identify and deploy Java services. Starting off with a manual transformation will allow you to immediately take advantage technologies such as extensive modern libraries, Java services, Web Services, or microservices – common modernization goals.



In addition, there are a wide variety of common situations including language types, batch mode, mapping issues, and data access that present inherent issues for automation. Simply put, there's no magic wand that can transform any given legacy application into a modern one. Creating modern applications requires adapting the applications specifics to the target language and environment, taking advantage of new standards and styles, and performance tuning the modernized application. Henceforth, automation typically fails when the goal involves making major changes to the architecture and taking full advantage of the target language.

Application Modernization as practiced by QAT Global is an architected and engineered process that results in a smaller, more agile software footprint that is more responsive to the organization and includes extended capabilities and new functionality. Moving forward, our modernized applications can then be continuously modernized in a high-value/low-risk way.

When selecting this application portfolio modernization strategy, it should be done in concert with an appropriate level of organizational transformation. Our standards-based architecture and development framework provides the flexible best-practice to enable that transformation and is grounded on service management and governance. Unlike automation vendors, we integrate your team throughout the project in support of a strong sense of internal ownership and of the long-term integrity of the modernized solutions.





## Modernize Without Compromise

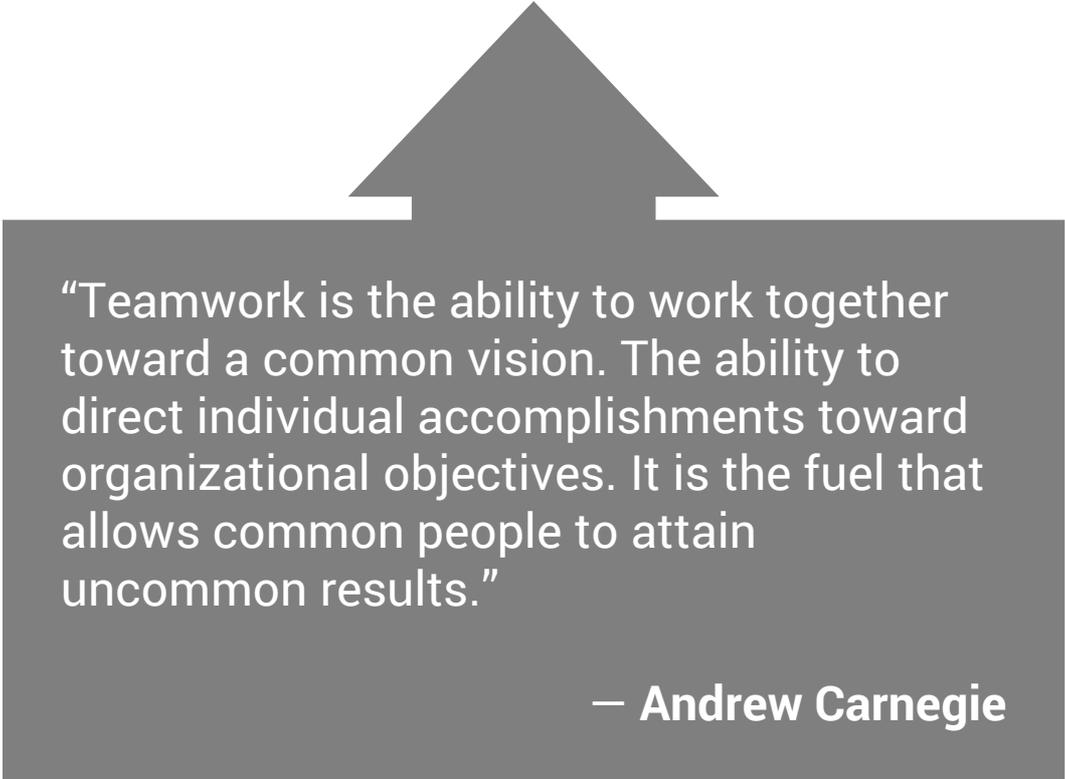
Transitioning away from legacy systems is a complex undertaking. It's different from application to application, and organization to organization. QAT Global provides a flexible, incremental approach using people over automation. This approach will address your unique requirements and deliver a portfolio of modernized applications, in the truest sense, while balancing cost, risk, and time.

QAT Global welcomes the opportunity to engage with organizations in North America, to help them discover the optimal strategic pathway to modernizing their enterprise systems, paving the pathways to reduce risk, increase flexibility, and ensuring that they are ready to deal with any eventuality.

**For more information.**

Please call: 402.391.9200

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“Teamwork is the ability to work together toward a common vision. The ability to direct individual accomplishments toward organizational objectives. It is the fuel that allows common people to attain uncommon results.”

— Andrew Carnegie



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